



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,535	11/08/2001	Shih-Zheng Kuo	JCLA7062	9209

7590  
J.C. Patents, Inc.  
Suite 250  
4 Venture  
Irvine, CA 92618

09/23/2004

EXAMINER

KASSA, YOSEF

ART UNIT	PAPER NUMBER
----------	--------------

2625

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/005,535

Applicant(s)

KUO, SHIH-ZHENG

Examiner

YOSEF KASSA

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Nov. 08, 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et al (U.S. Patent 6,011,877), and further in view of Caspi (U.S. Patent 5,774,572).

With regard to claim 1, Ishikawa et al discloses a method of enhancing, i.e., quality correction, modulation transfer function performance (see col. 5, lines 39-43), obtaining smooth image, i.e., original image, digital data (see col. 5, lines 40-43); scanning the object in a forwarding direction, i.e., Horizontal direction, and a direction perpendicular (the mathematical relationship of vertical and horizontal scanning is perpendicular to each other) to the forwarding direction (see Fig. 8A, item a and b); and processing digital data of a calculation pixel, i.e., extracted character analyzed, obtained by scanning the object according to the smooth image digital data (see col. 7, lines 46-52).

Ishikawa et al did not explicitly call for scanning an object by using a scanner with a linear sensor. However, at the same field of endeavor, Capsi discloses this feature (see col. 5, lines 54-67). At the time of invention was made, it would have been

Art Unit: 2625

obvious to an ordinary skill in the art to incorporate the teaching of Capsi's linear array CCD's into Ishikawa et al system. The motivation doing so is to produce a digital image of an object with a given resolution and processing the image to produce an image object at a resolution greater than the given resolution.

With regard to claim 2, Ishikawa et al discloses wherein the smooth image digital data is obtained prior to scanning the object (see col. 7, lines 24-27, that is, the original image is obtain before scanning).

With regard to claim 3, While Ishikawa et al discloses obtaining the smooth image digital data, he is silent about obtained smooth image from a smooth image region with a uniform scan brightness. However, at the same field of endeavor, Capsi discloses this feature (see col. 6, lines 20-24). At the time of invention was made, it would have been obvious to an ordinary skill in the art to incorporate the teaching of Capsi's scanning uniform bright object into Ishikawa et al system. The motivation doing so is to compensate the brightness of each pixel in the object.

***Allowable Subject Matter***

2. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Other Prior Art Cited***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. (5,278,653) to Mead discloses methods and apparatus for digital correction of afterglow in flying spot scanners.

US Patent No. (5,910,795) to Whittaker discloses digital image signal processing.

US Patent No. (6,667,815) to Nagao discloses method and apparatus for processing images.

US Patent No. (6,332,574) to Shigekusa et al discloses method of reading bar code.

US Patent No. (5,949,924) to Noguchi et al discloses image processing apparatus, method and computer program product.

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSEF KASSA whose telephone number is (703) 306-5918. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH MEHTA can be reached on (703) 308-5246. The fax phone numbers for the organization where this application or proceeding is assigned is (703)

Application/Control Number: 10/005,535

Page 5

Art Unit: 2625

872-9306 for regular communication and (703) 872-9306 for after Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (703) 306-5631. The group receptionist number for TC 2600 is (703) 305-4700.

**PATENT EXAMINER**

Yosef Kassa

09/13/04.

A handwritten signature in black ink, appearing to read 'Yosef Kassa', is written over the printed name. The signature is stylized with a large, sweeping initial 'Y' and a long, horizontal stroke extending to the right.